

Improving the diagnosis of cancer in primary care: a feasibility economic analysis of the ThinkCancer! study

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Background

Cancer survival in the UK remains low compared to other Western countries including Australia, Canada and European countries. Delays in cancer diagnosis have an adverse impact on patient well-being and survival. Welsh Government outline a number of challenges with respect to earlier cancer diagnosis, including a lack of awareness of 'red flag' symptoms and difficulties among GPs and other healthcare professionals in identifying cancers that present with vague or non-specific symptoms. For some cancers, earlier diagnosis is associated with greater survival, better patient experience and quality of life, and lower healthcare costs.

Methods

The ThinkCancer! intervention is a complex behaviour change intervention, which aims to change the behaviours of primary care practice teams when thinking of and acting on clinical symptoms that could be cancer. From an NHS perspective, we conducted a feasibility economic analysis of the ThinkCancer! intervention. We used micro-costing methodology to determine whether it was feasible to gather sufficient economic data to cost the ThinkCancer! intervention. Due to the Covid-19 pandemic, the intervention was mostly delivered remotely in a digital format. Intervention deliverers completed data collection sheets (including forms recording materials used and intervention deliverer time) and provided information on primary care staff attendance at each of the ThinkCancer! workshops. Budget impact analysis and sensitivity analysis were conducted to explore the costs of face-to-face delivery of the ThinkCancer! intervention as intended pre-COVID-19.

Findings

The total costs of delivering the ThinkCancer! intervention across 19 general practices in Wales was £25,030. Costs per practice ranged from £431 to £2,498, with an average cost per practice of £1,311 (SD: 579.5). The potential budget impact if the intervention were to be delivered face-to-face across the 19 general practices would be £34,630. Sensitivity analysis revealed that if the intervention were to be delivered by one GP educator, the total estimated cost for face-to-face delivery would be £31,232. With the addition of one support role assisting the GP educator with the intervention delivery, the total cost of face-to-face delivery is estimated to be approximately £33,138.

Conclusions

Results of this feasibility study are being used to inform a definitive economic evaluation alongside a pragmatic randomised controlled trial. Primary care interventions to expedite the diagnosis of symptomatic cancer have the potential to reduce large costs to the NHS and improve patient and carer outcomes as later stage cancer treatments are often longer, more aggressive to patients, with larger associated healthcare costs compared to earlier stage treatment.

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